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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,005	01/18/2006	Heon Ho Lim	51840102PUS1	7188
2292 7590 01/09/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
PERRIN, JOSEPH L				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/565,005

Applicant(s)

LIM ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) 3 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-9 is/are rejected.
7) ☒ Claim(s) 7 and 8 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 20080710; 20080118
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Species I, Figure 2, readable on claims 1-2 and 4-9 in the reply filed on 23 October 2008 is acknowledged. The traversal is on the ground(s) that the four species indicated by the Examiner "should be considered to be a reasonable number of species" and that "examination of all four species together in one application would not place an undue burden on the Examiner. This is not found persuasive because applicant's argument appears to be based on opinion and provides no evidence or showing of precisely why the particular species in the instant case are a "reasonable" number of species or why searching all four mutually exclusive species would not place an undue burden on the Examiner. Contrary to applicant's apparent position that four species are a "reasonable" number of species per 37 C.F.R. § 1.146 and should not be restricted, if this were true in every situation the rule would read "four or less species permitted per application". Clearly this is not the case. The determination of what is "reasonable" is a case-by-case basis. For instance, two species from the chemical genus of halogens (i.e. chlorine and bromine) may be "reasonable" whereas two mutually exclusive structures defining washing machines (as in the instant case) may not be "reasonable". The Examiner disagrees for reasons already indicated above and maintains the position that, in the instant case, the specific mutually exclusive washing machines restricted as four species are not a reasonable number of species and since the search for the structural limitations for one washing

machine is not required for the others there would be a serious burden on the Examiner to search all mutually exclusive structural limitations of the washing machines.

The requirement is still deemed proper and is therefore made FINAL.

Applicant is reminded that upon allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 C.F.R. § 1.141.

Information Disclosure Statement

The information disclosure statement filed 18 January 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Similarly, the information disclosure statement filed 10 July 2008 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Specifically, no copy of JP 2001-129300-A was received and, therefore, the reference has been lined through and not considered.

Claim Objections

Claim 8 is objected to because of the following informalities: In claim 8, the abbreviation "PSTN" should be parenthetically followed by what is meant by the abbreviation. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said washing tube" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Also in claim 1, the recitation of the drainage discharging fluid "to the outside" is indefinite because it is unclear with respect to where the term "outside" refers. Is this "outside" as in outside of the building or simply outside of the washing tub?

In claim 8, lines 6-7, the phrase "such as..." renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 9 recites the limitation "said main computer" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: structure for performing the claimed self-diagnostic function and communication function recited in the preamble (with no corresponding structure associated therewith in the body of the claim). Simply stated, no corresponding structure is recited in the claim which is capable of performing the recited functions.

Clarification and correction are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4 & 5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Publication No. 2002/0133886 to SEVERNS et al. (hereinafter "SEVERNS"). SEVERNS discloses a washing machine comprising a washing tub (2) modified to selectively perform either a water washing or lipophilic fluid (for instance, hydrocarbons which read on an "oil") washing, a conventional water supply with detergent supply (common knowledge in the art, implicitly or inherently taught), an oil supply (19/20) with additive mounting (27/28), a heater (33) and fan (31) for drying the laundry (part of claim

2), and a water conversion unit for removing water hardness (claim 4; see paragraph [0150]).

Regarding claim 5, while SEVERNS discloses a “conventional” washing machine (i.e. using water) modified with the dry cleaning structure using an “oil” supply as indicated above, SEVERNS does not expressly disclose using a temperature control unit for controlling the water temperature supplied. However, the use of such temperature control means is common knowledge in the washing machine art and can be generally found in practically every domestic washing machine as domestic washing machines are conventionally connected to hot and cold water supplies and the water temperature is controlled based on user selection. Thus, this common knowledge temperature control is considered to read on the “conventional” washing machine of SEVERNS and is inherently or at least implicitly taught.

Regarding the intended use of “self-diagnostic function” and “communication function” in the preamble, the conventional washing machine of SEVERNS is fully capable of performing such broad intended use recitations due to the various sensors and control means associated therewith, such being readily understood by one having ordinary skill in the art. Simply stated, such intended use function without any corresponding structure is not afforded significant patentable weight in the apparatus as claimed. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525,

1528 (Fed. Cir. 1990). (emphasis in original) Accordingly, recitation of SEVERNS reads on the invention as claimed.

Claim 6 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SEVERNS. Recitation of SEVERNS is repeated here from above. SEVERNS discloses the claimed invention, and further discloses a reclamation tank (8) for recovering the solvent and a distillation unit (15) comprising structure readable on a heat exchanger which heats the oil and a vaporizer which vaporizes the oil (necessary for distillation), and the reclamation unit being one of formed with the washing machine or independent from the washing machine (see Figure 1 and relative associated text). While the broadly claimed structure is readable on a conventional distillation unit with plural heat exchangers (any structure which is capable of exchanging heat), even if *arguendo* one were to argue that SEVERNS does not disclose using plural heat exchangers, the use of more than one distillation unit is well with the level and skill generally available to one having ordinary skill in the art to yield the predictable results of improving reclamation and purification of used solvent. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8; *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Moreover, the Examiner notes that the use of heat exchangers and vaporizers to treat dry cleaning fluid from a reclamation tank is well-known and common knowledge in the dry cleaning art in recovering, purifying and reusing solvent in a closed system and, as claimed, not considered a point of novelty in the textile treating art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over SEVERNS in view of U.S. Patent No. 7,017,280 to GREEN et al. ("GREEN") or U.S. Patent No. 5,050,313 to WAKAEYA et al. ("WAKAEYA"). Recitation of SEVERNS is repeated from

above. While SEVERNS discloses a washing machine with drying function including a drying unit with fan and heater, SEVERNS does not teach or reasonably suggest a fan motor with inverter. However, both GREEN (inverter (66); see Figures and relative associated text) and WAKAEYA (col. 10, lines 2-4) teach that it is known to provide a laundry drying unit fan motor with an inverter to control the operation of the blower.

All of the component parts are known in SEVERNS, GREEN and/or WAKAEYA. The only difference is the combination of "old elements" into a single laundry appliance by providing the drying unit in SEVERNS with an inverter as taught in GREEN and/or WAKAEYA.

Thus, it would have been obvious to one having ordinary skill in the art to mount the inverter taught by GREEN and/or WAKAEYA onto the drying unit as shown in SEVERNS, and an inverter could be used in combination with a standard laundry drying unit to achieve the predictable results of controlling the blower. Moreover, there would be a reasonable expectation of success in combining the cited references, since each of the references are analogous to the textile treatment art, namely laundry washing and/or drying.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over SEVERNS in view of U.S. Patent No. 5,987,105 to JENKINS et al. ("JENKINS") and U.S. Patent Publication No. 2002/0052194 to SIVAKUMAR.

Recitation of SEVERNS is repeated here from above. SEVERNS discloses the claimed invention but does not disclose transmitting an alarm signal and washing machine information to a mobile terminal of the user by using a SMS (i.e., a text

message to a cellular telephone). JENKINS teaches that it is known to provide a washing machine (1) which wirelessly transmits an alarm to a telephone (8) and mobile terminal (13) of a user for the purpose of transmitting an alarm or indication of a certain condition (see Figure 1 and relative associated text). SIVAKUMAR teaches that it is known to provide a computer (i.e. monitoring device) which detects an event, transmits a message triggering signal indicative of the event to a mobile terminal (i.e. a portable communication device capable of wirelessly receiving text messages (SMS), wherein the event may be a status of a washing machine (see entire document, for instance, claim 1, claims 14-15 (audible or visible message), paragraph [0023] and paragraph [0028])). Therefore, the position is taken that it would have been obvious to provide the washing machine of SEVERNS with the remote communication system of JENKINS and SIVAKUMAR for the purpose of remotely monitoring the status of a washing machine via SMS, for instance, from a mobile phone.

Allowable Subject Matter

Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent Publication No. 2005/0183208 to SCHEPER et al., which is substantively cumulative to SEVERNS; U.S. Patent Publication No.

2003/0070084 to SATOMAA et al., which discloses the conventional use of SMS text messaging for network communication and monitoring; and U.S. Patent No. 6,745,495 to RIDDLE et al., which is substantively cumulative to GREEN.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792